

CLAIMS

What is claimed is:

1. An self leveling method for clamping apparatus in a clamp for a lead frame in a wire bonding apparatus having a lower clamping surface for supporting a plurality of lead frames, said method comprising:
providing an upper clamping member including a wirebonding window frame having a window therein movable under a clamping force for engaging portions of said plurality of lead frames, at least one lead frame of said plurality of lead frames located under said wirebonding window frame;
providing a resilient member located substantially above said upper clamping member; and
contacting said upper clamping member for substantially causing said wirebonding window frame to engage said portions of said plurality of lead frames.
2. The method of adjusting of claim 1, wherein said upper clamping member comprises a member of a polymeric material.
3. The method of adjusting of claim 1, wherein said upper clamping member comprises a member of a polyimide material.
4. The method of adjusting of claim 1, wherein said resilient member comprises a polymeric material.
5. The method of adjusting of claim 1, wherein said resilient member comprises one of polytetrafluoroethylene material and urethane material.
6. The method of adjusting of claim 1, wherein a thickness of said resilient member comprises a range of approximately 0.005 to approximately 0.1 inches (approximately 0.0125 to 0.25 cm).

7. A self leveling method for a self adjusting clamping apparatus having a lower clamping surface supporting a lead frame in a leadframe clamp for connecting a semiconductor device to a leadframe in a wire bonding apparatus, said method comprising:
providing an upper clamping member including a wirebonding window frame having a window therein movable under a clamping force to engage portions of said at least one lead frame underlying said wirebonding window frame;
providing a resilient member located on one side of said upper clamping member; and
contacting portions said upper clamping member for substantially causing said wirebonding window frame to engage said portions of said at least one lead frame located on one side of said wirebonding window frame.

8. The method of adjusting of claim 7, further comprising:
providing a semiconductor device connected to said at least one lead frame; and
connecting said portions of said at least one lead frame to portions of said semiconductor device.

9. The method of adjusting of claim 7, wherein said upper clamping member comprises a member of a polymeric material.

10. The method of adjusting of claim 7, wherein said upper clamping member comprises a member of a polyimide material.

11. The method of adjusting of claim 7, wherein said resilient member comprises a polymeric material.

12. The method of adjusting of claim 7, wherein said resilient member comprises one of polytetrafluoroethylene material and urethane material.

13. The method of adjusting of claim 7, wherein a thickness of said resilient member comprises a range of approximately 0.005 to approximately 0.1 inches (approximately 0.0125 to 0.25 cm).